

OK to enter
03/17/05
h.l.

IN THE CLAIMS:

1. (Currently amended) A micorarray substrate comprising a patterned photoresist film having one or more spot regions therein, the photoresist film being capable of delamination detachable from the substrate, wherein the spot regions are defined by the patterned photoresist film.
2. (Previously Presented) The microarray substrate of claim 1, wherein compounds having functional groups capable of covalently binding to probes are attached to the substrate in the spot regions.
3. (Previously Presented) The microarray substrate of claim 2, wherein probes are covalently bound to the compounds having functional groups, and wherein the probes are proteins, nucleotides, or polysaccharides.
4. (Original) The microarray substrate of claim 2, wherein the compounds having the functional groups are silane compounds with aldehyde, epoxy, or amine end groups.
5. (Currently amended) A microarray comprising probes immobilized in spot regions of a microarray substrate, the microarray substrate including a detachable patterned photoresist film on which the spot regions are formed, wherein the detachable patterned photoresist is capable of delamination from the substrate.

1 ~~6.~~ (Currently amended) A method of detecting a target material, comprising:

(a) preparing a substrate having a patterned photoresist film, the patterned photoresist film being detachable from the substrate and having one or more spot regions therein, wherein the spot regions are defined by the patterned photoresist film;

(b) immobilizing probes in the spot regions to prepare a microarray;

(c) contacting the probes and a sample containing the target material to react the probes and the target material;

(d) detaching the photoresist film from the microarray to remove the target material nonspecifically bound to the photoresist film, wherein detaching comprises delaminating; and

(e) detecting the reaction between the target material and the probes.

2 7. (Original) The method of claim ~~6~~, wherein the probes are proteins, nucleotides, or polysaccharides.

3 ~~8.~~ (Previously Presented) The microarray of claim ~~5~~, wherein the probes are covalently bound to functional groups of compounds previously attached to the spot regions.

4 ~~9.~~ (Previously Presented) The microarray of claim 8, wherein the probes comprise proteins, nucleotides, or polysaccharides.

5 ~~10.~~ (Previously Presented) The microarray of claim 8, wherein the compounds comprise silane compounds with aldehyde, epoxy, or amine end groups.

11. (Cancelled)